

Annex 2: Impact of Basel III on MREL

1. The EBA has presented its advice¹ on the implementation of the revised Basel III framework to the Commission, as published on 5 August and on 4 December. However, this analysis did not include estimates on the impact of the revised Basel III framework on MREL/TLAC requirements due to lack of data on the issue. The analysis presented here supplements the published CfA work, by combining the impact estimation of the finalisation of Basel III with some elements of the BRRD2 framework as well as recent information on available MREL resources and decisions taken by resolution authorities under BRRD1. The detailed information on available MREL resources and decisions regarding EU banks under BRRD1, together with the resulting shortfalls, will be presented in an EBA report to be published in January 2020.
2. The impact on the MREL requirements stemming from Basel III could in theory be estimated both under the current BRRD1 and under a BRRD2 setting. However, for both frameworks, in order to understand the impact of the Basel III revised framework on MREL requirements, it must be stressed that it is not possible to provide an exact assessment, as MREL is a bank specific requirement, reflecting an individual bank's resolution strategy as set by the relevant resolution authority.
3. Given that the BRRD2 will be the applicable framework with its expected entry into force before the implementation of the revised Basel III framework, the main focus of the assessment is the interaction between Basel III and the BRRD2. The data sample for this BRRD2-based part of the analysis is limited to the 36 banks in the EU which are expected to be subject to BRRD2 subordination requirements and which formed part of the sample underlying the August 2019 CfA report on the revised Basel III framework.
4. The estimation is based on the fact that the BRRD2 will introduce (i.e. at level 1) minimum subordination levels that are not bank specific and are therefore straightforward to estimate both under a high and a low scenario (see Annex 1).² These minimum levels only apply to GSIIIs and top Tier banks of which we have 36 in our sample, representing 75% of the total RWA included in the CfA sample.
5. For these 36 banks, we estimate that the increased RWAs under the revised Basel III framework (total RWAs for this subsample would increase by 28%) would lead to a 22%-26% increase in BRRD2 requirements. The reason for having an estimate that is lower than the increase of RWAs, reflects the fact that BRRD2 subordination levels are partially a factor of non-risk based metrics (such as Leverage ratio exposure and TLOF).

¹ See <https://eba.europa.eu/eba-advises-the-european-commission-on-the-implementation-of-the-final-basel-iii-framework>.

² To reflect the possibility of senior debt allowance, the BRRD2 estimation is computed on the basis of two possible scenarios (no senior debt allowance earmarked as a 'high' scenario and full senior debt allowance as a 'low' scenario), leading to a range of possible values

6. As indicated in table 1, this increase translates into a shortfall in MREL resources ranging from EUR 86bn under the low scenario to EUR 105bn under the high scenario. As indicated, in the calculation of these shortfalls, it has been assumed that shortfalls in own funds resulting from Basel III revised framework (“MRC shortfall”) will be closed by a build-up of own funds. To the extent these banks have an MREL shortfall, such a build-up of own funds (which qualify as MREL eligible resources) will also be used to meet the BRRD2 MREL subordinated requirement. In this way, covering the MRC shortfall will contribute to the reduction of the MREL shortfall. Also, the MREL shortfall has been reduced by any MREL shortfall that would occur against the BRRD2 MREL subordinated requirements before the implementation of the revisions to the Basel III framework.

Table 1: MREL shortfall attributable to revised Basel III –BRRD2 based sample

	Total Basel III RWAs	# banks	MRC shrotfall	Of which covering MREL shortfalls	MREL shortfall attributable to Basel 3
CfA sample	10,407	180	135	NA	NA
BRRD2 subordinated MREL - high	7,918	36	112	80	105
BRRD2 subordinated MREL - low				59	86

Note: For the sample of 36 banks, the capital shortfall of the finalisation of Basel III is assessed to be EUR 112bn. It is assumed that this capital will be raised and this has been deducted in the calculation of the MREL shortfall under BRRD2. It is also assumed that any shortfalls arising from an implementation of BRRD2 subordination requirements under the current Basel III framework will be covered.

7. To include a broader range of banks, the BRRD2 analysis is complemented with a BRRD1 based analysis on banks not expected to be subject to BRRD2 subordination requirements. This additional analysis covers the 47 banks which are both in the sample of the CfA report as well as in the (BRRD1 based) MREL report. These banks cover 10% of the sample of the CfA report, which together with the 36 banks included in the BRRD2-based analysis leads to a total coverage of 85% of the original CfA sample.³
8. To estimate the additional shortfall relevant to these 47 banks, the impact of the Basel III revised framework on MREL requirements is solely estimated using BRRD1 based data (on available MREL resources and MREL requirements) combined with the estimated increases in RWAs due to the Basel III revised framework. The MREL requirements are linearly scaled with the increase in RWA, after which they are compared to available own funds and eligible liabilities, in order to obtain figures for hypothetical MREL shortfalls.

Table 2: MREL shortfall attributable to revised Basel III –BRRD1 based sample

³ The sum of banks (83) of the BRRD2 based sample of 36 banks and the BRRD1 based sample of 47 banks represent the totality of banks that are used in both the EBA MREL quantitative report (222 banks) and the CfA exercise (180 banks). The selection of the samples stems from the fact that out of the CfA sample, only 83 banks currently have an MREL decision in place, and information on available MREL resources are present.

	EURbillion	Total Basel III RWAs	# banks	MRC shrotfall	Of which covering MREL shortfalls	MREL shortfall attributable to Basel 3
BRRD 1 MREL sample		1,006	47	9	6	16

Note: For the sample of 47 banks, the capital shortfall of the finalisation of Basel III is assessed to be EUR 9bn. It is assumed that this capital will be raised and this has been deducted in the calculation of the MREL shortfall under BRRD1. It is also assumed that any shortfalls currently arising from BRRD1 under the current Basel III framework will be covered.

9. As indicated in table 2, for this sample of 47 additional banks, we find that in absolute terms, total MREL requirements under BRRD1 would indeed increase, in line with MRC and RWAs, by around 28%. This is to be expected as the MREL requirement for these banks is just scaled up with the increase in RWA, which for this specific sample is around 27%. This increase in MREL requirements results in an estimated shortfall of EUR 16bn attributable to the revised Basel III framework, which would come on top of both the existing shortfall under BRRD1 and any estimated shortfall in own funds due to the implementation of the revised Basel III framework.
10. It needs to be noted that the estimation of the impact for the additional sample of 47 banks is performed based on the hypothetical assumption that MREL decisions under BRRD1 are mechanically linked to the RWA of a bank, rather than other indicators such as leverage ratio exposure (or, that they would be determined as an absolute EUR MREL amount). In fact, the current BRRD1 framework already provides for a leverage ratio as a potentially applicable base. In addition, MREL requirements can be adjusted by Resolution Authorities in light of the resolution strategy – for instance by adjusting the MREL beyond the 8% total liability and own fund (TLOF) benchmark to ensure contribution to losses of resolution financing arrangements.
11. For these reasons, it is not possible, based on available data, to foresee how the RWA inflation will affect the existing MREL requirements set by Resolution Authorities; therefore the impact of RWA inflation from the implementation of the revised Basel III framework can only be approximated on the basis of strong assumptions. These assumptions are likely to contribute to an overstating of the impact. This results from the fact that for some banks either the leverage ratio or the 8% of total liabilities requirement will be the driving requirement for subordination and these measures will remain unaffected by the revised Basel III framework.
12. As indicating in table 3, aggregating the results from the BRRD2 based analysis for the 36 bank sample with the results from the BRRD1 based analysis for the 47 bank sample, we find that in absolute terms, the total estimated MREL shortfall for the total of 83 banks, attributable to the revised Basel III framework, would be within the range of EUR 102bn to EUR 121bn.

Table 3: MREL shortfall attributable to revised Basel III – aggregation of BRRD2 based and BRRD1 based sample

	EURbillion	Total Basel III RWAs	# banks	MRC shrotfall	Of which covering MREL shortfalls	MREL shortfall attributable to Basel 3
BRRD 1 MREL sample		8924	83	121	[66;89]	[102;121]

13. Together with the possible overestimation of the impact on the remaining banks (as it depends on the hypothetical assumption that MREL decisions are only and mechanically linked to the RWA of a bank), it should also be noted that this shortfall cannot be directly compared with the shortfall of own funds as a result of the implementation of the revised Basel III framework, as the shortfall resulting from MREL requirements can be covered by MREL-eligible instruments. Furthermore, the timeline for closing the shortfall related to the revised Basel III framework is longer than what is currently envisaged under BRRD2.
14. In addition, it is important to note that the methodology applied in the CfA on the revised Basel III framework already includes a significant layer of conservatism, most notably in the context of Pillar 2. Hence, the conservatism in the methodology applied in this analysis is further reinforced by conservative RWA estimates reported in the CfA on the revised Basel III framework. This combination, with the fact that the estimation also does not take into account any future adjustments of current MREL targets and ignores any changes from BRRD2 besides the subordination requirements, underlines that the estimates should be considered as highly conservative.

Annex 1: Subordination levels under BRRD2

GSIIs	<p>High = max. [18% RWA + CBR; 6.75% of LRE; 8% TLOF]</p> <p>Low = max. [14.5% RWA + CBR; 6.75% of LRE-3.5%RWAs; 8% TLOF*(1-3,5%/(18%+CBR))]</p>
Top Tier	<p>High = max. [13.5% RWA + CBR; 5% LRE; 8% TLOF]</p> <p>Low = max. [13.5% RWA + CBR; 5% LRE; 8% TLOF* (1-3,5%/(18%+CBR))]</p>
Top tier Capped	<p>High = max. [13.5% RWA + CBR; 5% LRE; min. (27% RWA; 8% TLOF)]</p> <p>Low = max. [13.5% RWA + CBR; 5% LRE; min. (27% RWA; 8% TLOF*(1-3,5%/(18%+CBR)))]</p>

Annex 2a: Methodology and shortfall estimates,

a. Summary of the methodology

15. As described in the main text of the note, to isolate the impact on MREL shortfall that is attributable to the introduction of the revised Basel III framework, the shortfall estimates are reduced by any own funds shortfall resulting from increased MRC under the revised Basel III framework (referred to as “MRC shortfall”) as well as by the MREL shortfalls that would occur under either BRRD1 or BRRD2 without the implementation of the revised Basel III framework.
16. To calculate the MRC shortfall for the credit institutions in the sample, the same methodology has been applied as that underlying the advice on the implementation of the revised Basel III framework as published on 5 August 2019. This calculation is built on highly conservative assumptions, with in particular that all %RWA capital requirements, including for example the Pillar 2 and the systemic risk buffer requirements, will remain the same, regardless of increases in RWA.
17. To calculate MREL shortfalls the EBA MREL monitoring exercise has provided the necessary estimations on available own funds, eligible liabilities and required MREL. Without the implementation of the Basel III revised framework, based on available own funds and eligible liabilities as of December 2018 and the most recent MREL requirements, which are determined in the context of the currently applicable framework (BRRD1), it can be estimated that 117 resolution groups face a total MREL shortfall of EUR 178 billion⁴.
18. To calculate shortfalls attributable to the revised Basel III framework under BRRD2, for those 36 banks in the sample that are subject to the BRRD2 subordination requirements, the EBA MREL monitoring exercise only provides the necessary data on available own funds and eligible liabilities. To derive the shortfalls, these existing resources are compared with the estimations on the required amounts of BRRD2 subordination on the basis of the formulas in Annex 1.
19. To obtain the amount displayed in table 1 (i.e. the EUR 86bn to EUR 105bn range) of shortfall attributable to the Basel III revised framework for the 36 banks, the MRC shortfall is subtracted as well as the estimate of what the BRRD2 subordination shortfall would be if BRRD2 were applicable currently (i.e. comparing available resources against the BRRD2 subordination requirements based on RWAs and balance sheet numbers reported in December 2018). MRC shortfall is only subtracted to the extent that there is an MREL shortfall.
20. To calculate shortfalls attributable to the revised Basel III framework under BRRD1 (table 2), for those 47 banks in the sample that are not subject to the BRRD2 subordination requirements, the EUR 16bn is obtained by likewise subtracting an MRC shortfall of EUR 9bn in addition to a EUR 43bn currently existing MREL shortfall (under BRRD1).

⁴ [Link to published MREL report to be added]

21. Throughout this exercise, where comparing existing resources with required amounts of MREL/subordination, shortfalls for the shortfall banks are aggregated, without offsetting any shortfall with surpluses of other banks.

b. Background on the MREL monitoring exercise

22. The EBA MREL monitoring exercise focuses on external MREL requirements, available own funds and eligible liabilities and resulting shortfalls. The sample of 222 banks / resolution groups reflects the actual population of banks effectively subject to MREL requirements above their minimum capital requirement (i.e. earmarked for resolution as opposed to liquidation), actual MREL requirements for these entities or groups and MREL resources actually eligible in the relevant jurisdiction.

23. The study is realised at resolution group level, which is the level at which MREL decisions are taken. For instance, in the case of a multiple point of entry (MPE) group there is one MREL decision for each resolution group and thus one shortfall computed for each resolution group.

24. Subsidiaries are not considered. The focus on the report is external MREL decisions with the aim of understanding MREL related issuance needs. The impact of subsidiaries is captured by the impact of the resolution group as a whole. In the case of subsidiaries of foreign bank, those are excluded as well as, except in the case of an MPE strategy, they would be expected to issue MREL to their parent as opposed to issuing to the market.

25. The MREL decisions taken and methodology followed are set in the context of the currently applicable framework (BRRD1), which means that they may only be indicative at the time of the data collection.

c. Background on BRRD2 requirements used

26. Regarding BRRD2 the EBA has focused the analysis on subordination levels only, as required MREL levels under the new Directive would be not feasible to anticipate. Particularly, BRRD2 clarifies MREL calibration but leaves significant discretion for the resolution authority to adjust MREL decisions up or down – to ensure that MREL remains a bank specific requirement. However, BRRD2 does introduce a minimum level of subordination for both GSIs and Top tier banks – as the highest between multiples of RWAs, leverage exposures or total liabilities and own funds (TLOF).⁵ This calibration is not bank specific, beyond the matter of the senior debt allowance and thus straightforward to estimate.

27. For these reasons, BRRD2 subordinated levels were recalibrated using RWAs in accordance with the revised Basel III framework. EBA estimated the impact of the revised Basel III framework on BRRD2 by calculating shortfalls between existing resources and BRRD2 subordination levels. The outcome is provided as a range to reflect the fact that resolution authorities retain some discretion in the granting of a senior debt allowance of up to 3.5% RWAs to meet their

⁵ BRRD Art. 45b and see annex 1 for formulas

subordinated requirements (the “high” scenario for zero senior debt allowance and a “low” scenario for a full senior debt allowance).

28. It is to be noted that, next to characteristics that may lead to an overestimation, an aspect that may be underestimated in the calculation of subordinated debt shortfalls may be the additional level of subordination that can be imposed on banks at the discretion of the resolution authority, which is not taken into account in this approach. However, as explained earlier there are several reasons why the estimations are on the conservative side.